REMARKS

Claims 1-20 are pending in the present application. Claims 21-25 have been withdrawn. Claims 3 and 11 have been amended.

Rejections of the Claims Under 35 U.S.C. § 112, Second Paragraph

Claims 3-7, 9-15 and 17-20 are rejected under 35 U.S.C. § 112, second paragraph as failing to distinctly claim the invention. In particular, the Office Action points to the phrase "said metal disk" in claims 3 and 11 as lacking antecedent basis. These claims have been amended. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

Rejections of the Claims Under 35 U.S.C. §§ 102(b) and 103(a)

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,897,424 to Evans ("Evans"). Claims 2-4 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of "Etching in Microsystem Technology," pp. 1-3 ("Kohler") and "Machining Fundamentals" to J. Walker, pp. 511-16 ("Walker"). Claims 5 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Kohler and Walker and in further view of what is termed Applicant's Admitted Prior Art ("AAPA"), U.S. Patent No. 4,037,367 to Kruse ("Kruse") and U.S. Patent No. 5,509,556 to Balz et al. ("Balz"). Claims 6 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Kohler and Walker and in further view of U.S. Patent No. 3,291,738 to Sciambi ("Sciambi"). Claims 7, 9, 15 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Kohler and Walker and in further view of "Silicon Processing for the VLSI Era," pp. 407-09 and 529-30 to Wolf et al. ("Wolf"). Claims 10, 11 and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of Kohler and Walker and in further view of U.S. Patent No. 4,821,461 to Holmstrand ("Holmstrand").

Embodiments of the present invention refer to a lapping plate for GMR heads to be used in hard disk drives. In one embodiment, a metal lapping plate is embedded with diamond particles in non-etched areas of the metal plate.

As to the § 102(b) rejection, the Office Action relies on Col. 1, lines 10-40, Col. 3, lines 34-46 and Col. 6, lines 1-5 of Evans as showing the selective etching of a metal plate and imbedding diamond particles into the metal plate to manufacture a lapping plate. None of these sections refer to selective etching. Col. 3, lines 34-46 simply discusses the materials that can be used for the textured lap substrate. Col. 1, lines 10-40 simply mention that areas can be provided that can act as reservoirs for the polishing medium and material removed from the substrate. Col. 6, lines 1-5 discusses the types of polishing media that can be used. Since all of the features of claim 1 are not found in Evans, reconsideration and withdrawal of the rejection of this claim under 35 U.S.C. § 102(b) is respectfully requested.

As to the § 103(a) rejection of claims 2-4 and 11-12, the Office Action states that Evans teaches that it is old to have a metal plate that has been "machined or etched to form texture or pattern that provides for the retention of polishing media or the accumulation of material removed from the surface." Evans teaches only that the lapping plate is to be machined or etched, but provides no disclosure as to how that would be accomplished. Claims 2-4 and 12 pertain to use of photoresist in the etching operation. Such is not described in Evans. Kohler refers to the use of photoresist in chemical blanking. Chemical blanking as shown in Fig. 28-9 of Walker is the process of "cutting out" parts from a sheet of material. In other words, rather than using a metal stamp (like a cookie cutter), chemicals are used to remove all of the metal from particular areas, leaving just the photoresist-covered areas of the sheet. Accordingly, as indicated on p. 514, the process is not recommended for materials that are thicker than 2.3 mm and would not be useful for a lapping plate. If a proposed modification would render a device being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984); M.P.E.P. § 2143.01.

Kohler is similar in that it describes the use of photoresist in microelectronics, where a metal layer in an integrated circuit or PCB is etched so as to remove all metal material in photoresist-developed areas. As in the chemical blanking example of Walker, the thickness of the metal is extremely small in Kohler and not suitable at all for a lapping plate. Given these differences between the polishing lap in Evans and the devices of Kohler and Walker, there is no motivation to combine the references in the manner to achieve the invention as recited in claims 2-4 and 12. The Office Action fails to meet the requirement that the suggestion to combine the references to achieve the claimed invention must come from the references themselves and not the Applicants' specification. See M.P.E.P. § 2143.01 (esp. sec. III).

The remaining references fail to make up for the deficiencies of Evans, Kohler and Walker. Wolfe is similar to Kohler in that it refers to the complete removal of metal material in photoresist-developed areas and does not refer to lapping plates at all. Though Kruse discusses a mesh pattern, it does not refer to the recited etching steps of the claims. Balze refers to the use of a metal mask in the implementation of microelectronics such as shown in Wolfe and Walker. In

Holmstrand, small cavities in the surface of the lapping plate are created using a glass bead blasting apparatus. Sciambi simply refers to the use of UV light to cure photoresist in the same applications as Wolfe and Kohler.

As stated in the Background section of the present application, the present invention provides for an improved lapping plate for lapping read/write head components in disk drives. As discussed in paragraph 10 of the present application there are sufficient drawbacks to using the methods described in Kruse and Holmstrand. Neither this paragraph nor any of the cited references, taken singularly or in combination, teaches or suggests the claimed features of manufacturing a lapping plate (claims 1-10), much less the method of fabricating a read/write head for a disk drive (claims 11-20). Accordingly, reconsideration and withdrawal of the rejection of claims 2-20 under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

The Applicants respectfully submit that this application is in condition for allowance. A Notice of Allowance is earnestly solicited.

The Examiner is invited to contact the undersigned at (202) 220-4255 to discuss any matter concerning this application. The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 11-0600.

Respectfully submitted,
KENYON & KENYON

Dated: August 24, 2006

By: ______________________
Shawn W. O'Dowd
Reg. No. 34,687

KENYON & KENYON LLP
1500 K Street, NW
Suite 700
Washington, DC 20005
(202) 220-4200 telephone
(202) 220-4201 facsimile
DC1-626344